

Visualization and Controls Program Peer Review
Marriott Crystal City at Reagan National Airport
October 17-18, 2006 Arlington, Virginia
Tuesday, October 17, 2006
Continental Breakfast 8:30 - 9:00 a.m.

<p style="text-align: center;">PLENARY SESSION 9:00 - 10:00 a.m. Overview of the Office of Electricity (OE) - Kevin Kolevar NERC/ERO - Rick Sergel R&D Program Description - Patricia Hoffman</p>	
BREAK 10:00 - 10:20	

SESSION A		SESSION B	
10:20	Introduction - Phil Overholt	Introduction - Gil Bindewald	
10:30	Eastern Interconnection Phasor Project Overview Steve Widergren, PNNL	Developmental Field Tests Under the Modern Grid Initiative	
10:40			
10:50	National Institute of Standards and Technology Synchro metrology Lab - Jerry Stenbakken, NIST	Compact Transformers for Secure High Power Applications - Waukesha Electric Systems	
11:00			
11:10	NERC Reliability Compliance Monitoring Carlos Martinez, EPG	Electric Core Transformers Incorporating Wire Magnetic Components Harrie Buswell - Buswell Energy	
11:20			
11:30	Role of Substation Information in Real Time Control – Mladen Kezunovic, PSERC/TAMU	Solid State Fault Current Limiter EPRI	
11:40			
11:50			
12:00	LUNCH - 12:30 - 1:30		
12:10	Integrated System Security Research Roadmap, Pete Sauer, PSERC/UIUC	Power Line Conductor Accelerated Testing John Stovall, ORNL	
12:20			
12:30	Control Center Visualization Techniques - Tom Overbye, PSERC/UIUC	Intelligent Power Infrastructure Consortium Deepak Divan - Georgia Tech	
13:30			
13:40	Integration of Substation IED Information into EMS Functionality - Mladen Kezunovic, PSERC/TAMU	High Accuracy, Low-Cost Sensors for Monitoring HV Transmission Lines Steve Syracuse - Promethian Devices	
13:50			
14:00	Distributed State Estimation with Application to Alarm Processing - Sakis Meliopoulos, PSERC/Georgia Tech	Low-Cost Sensors for Real-Time Monitoring of Overhead Transmission Lines Larry Fish - Underground Systems, Inc.	
14:10			
14:20	BREAK - 15:30 - 15:50		
14:30	Synchronized Phasor Measurement Power System Outlook Program - Bharat Bhargava, SCE	Advanced Technology Center (IL) Tom Tobin - S&C Electric	
14:40			
14:50	Load Control System for Electric Transmission and Distribution Dan Trudnowski - Montana Tech	Large Scale Energy Center in Michigan Johannes Schwank - University of Michigan	
15:00			
15:10	Development of High Power SiC Power Electronic Systems Alan Mantooth - University of Arkansas	Advanced Transmission Project (NY) Green Island Power Authority	
15:20			
15:30	ADJOURNMENT		
15:50			
16:00			
16:10			
16:20			
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17:00			
17:10			
17:20			

<u>LEGEND</u>	
CONTROL SYSTEMS	GRID TECHNOLOGY

Visualization and Controls Program Peer Review
Wednesday, October 18, 2006

Continental Breakfast 8:00 - 9:00 a.m.

	SESSION A	SESSION B
8:40		Introduction - Hank Kenchington
8:50		
9:00	Overview of Reliability and Markets	Cyber Security Assessments of Control Systems in
9:10	Bob Thomas, PSERC/Cornell	the Energy Sector
9:20		(INL)
9:30	Market Monitoring Tools	Cyber Security Assessment of Inter Control Center
9:40	Bernard Lesieutre, LBNL	Communications Protocol Implementations
9:50		(SNL/INL/PNNL)
10:00	Reliability as a Public Good	Scada Authentication Protocol (PNNL)
10:10	Bill Schulze, Cornell	
10:20		
10:30	BREAK 10:30 - 10:50	
10:40	Generation and Transmission Investment	Security Modeling of Wide Area Monitoring Systems
10:50	Tim Mount, Cornell	(PNNL)
11:00		
11:10	Demand Response Technical Assistance to ISO's	Development of a Virtual Control Systems
11:20	and Grid Operators - Brendan Kirby, ORNL	Environment Tool (SNL)
11:30		
11:40	Participation of Large Loads in Spinning Reserve	Cyber Security Assessment of Advanced Metering
11:50	Markets - John Kueck, ORNL	Infrastructure (SNL)
12:00		
12:10	LUNCH - 12:10 - 1:10	
12:20		
13:10	Transmission System Situational Awareness Tool -	Open Architecture, Interoperable Design for Control
13:20	Oak Ridge National Laboratory	Systems
13:30		(SNL)
13:40	Power Grid Simulator	AGA-12 Cyber Security Assessment
13:50	Chika Nwankpa, Drexel University	Performance Testing (PNNL)
14:00		
14:10	Electric Grid Monitoring (KY)	AGA-12 Cyber Security Assessment
14:20	University of Louisville/Genscape	Cryptographic Analysis (SNL)
14:30		
14:40	BREAK 2:40 - 3:00	
14:50		
15:00	Optimization of Power Flow Through High Voltage	Security Metrics for Control Systems (SNL)
15:10	Transmission Lines	
15:20	Satish Mahajan, Tennessee Tech	
15:30	Electric Utility T&D Line Engineering Program	Trustworthy Cyber Infrastructure for Power (TCIP)
15:40	Dennis Horn, Gonzaga University	(University of Illinois)
15:50		
16:00	ADJOURNMENT	

<u>LEGEND</u>	MARKETS
CONTROL SYSTEMS	CONTROL SYSTEMS SECURITY